CANADIAN MOLD PRODUCTS

PROTECTION AND REMEDIATION

Application Guidelines for Mold Stain Away & Keep Away Mold Remediation Products

MOLD STAIN AWAY™

KEEP AWAY

ME12 - 400 Crystal Shield

Application Guidelines
Specific to Mold Stain Away and
Keep Away Mold Remediation
Products
Mold Science Technologies Inc.

Background:

Mold Stain Away and ***Keep Away*** are two relatively new products to the restoration/remediation industries. As such it is in the best interest of both manufacturer and applicator that those who are asked to use these products to deal with mold are educated in their safe and effective use.

Manufacturer:

Mold Science Technologies Inc.
888.770.3030
www.moldstainaway.com

Assumptions:

Proper mold remediation protocols are followed by restoration/remediation professional to remove mold and maintain a safe and healthy work environment.

Process:

1. Hepa Filter heavy fruiting mold
2. Apply Mold Stain Away Mold Stain Remover
3. Apply Keep Away Crystal Shield

Products:

1. MOLD STAIN AWAY™ Mold Stain Remover

Mold Stain Away is an aggressive formulation of sodium hypochlorite and surfactants. Bleach has been used for decades to remove mold stains from affected surfaces. However, bleach is far from an optimal choice for addressing this challenge due to the fact when bleach is carried as a concentration in water, due to the surface tension difference between water and bleach, the water will soak into the substrate while the bleach remains floating on top, or running off of the surface altogether, and not really penetrating deep enough to remove all components of the mold. Mold Stain Away is sodium hypochlorite combined with an effective mixture of

surfactants and stabilizers which produce a modified surface tension such that it has the needed dwell time to truly remove the mold stains.

Coverage:

Each one gallon jug of Mold Stain Away will provide between 200 to 250 square feet of coverage. Factors that influence coverage include application technique, nozzle tip setting, type of wood being treated, moisture content of wood being treated and of course concentration of mold stains.

PPE Requirements:

Mold Stain Away is a high concentration of sodium hypochlorite. It is a rapid, and powerful stain remover due its concentration. This product will never be found on the shelves of a Home Depot. It is also a product that must be respected in its handling and application. To this end, the PPE recommended to be used is that typically used for a Level 2 or 3 mold remediation project. (CCA 82, 2004) Specifically:

PPE	Mold Removal	Application of Mold Stain Away
Suit	Particle Suits	Poly-Coated suit to protect against splash/spray Hood needs to be properly fitted around mask, taped to mask
Mask	Full Face Respirator	Full Face Respirator with Multi P100 vapor cartridge filter or equivalent (Level 2)
Mask	PAPR	Full Face Respirator with Multi-P100 vapor cartridge filter or equivalent (Level 3)
Gloves	Nitrile	8mm minimum
Tape	Red Tuc or equivalent	Seal suit to mask, gloves and booties. This is a step that is critical to protecting the applicator. Especially where the hood meets the face shield at the applicator's forehead and around neck area.

Preparation of Job Site:

It is assumed that all required site preparation needed for performing a mold remediation are in place. Containment from the living space is needed.
Drawing air from the containment area and pushing it up into the attic is helpful to prevent airborne particulate of the Keep Away drifting down into the containment area.
There are a couple of modifications recommended to prepare the site for an application of Mold Stain Away. Specifically:

Pathway through Home/Building:

Due to the potential damage to carpets or other colored surfaces that could happen due to an errant drop of product from a sprayer, drop cloths should be placed along the entire walkway that a person applying Mold Stain Away would travel.

Positive Air Flow (Attics only):

When active, Mold Stain Away has a smell of chlorine, not unlike that of a swimming pool. The smell will dissipate over a few hours. In order to spare the home or business owner this smell and to eliminate the possibility of fine airborne Mold Stain Away particulate reaching the living space, it is recommended that a fan be placed at the base of the opening, directing air from the containment area up into the attic. Positive pressure will push the chlorinated air out through the roof venting and the soffits. The attic is a separate space from the living space and applying positive pressure from the living space to the attic will not adversely affect the living space. In the event the attic space is small and air flow is minimal, it is recommended that negative pressure with a HEPA negative air unit be used and a draw to the unit established and vented outdoors via the vents and soffits.

Negative Pressure (Crawlspaces and Living spaces)

It is recommended that a HEPA negative air unit be used when using Mold Stain Away in an indoor or crawlspace environment. The key is to remove all potential odor from the application area as quickly as possible by venting the odor through lay-flat tubing exhausted out into the outdoors. All adjacent areas need to be separated by containment and venting/ducting that can transfer odor to an adjacent area need to be sealed off.

Carbon filters should be used and routinely changed in the event lay-flat tubing cannot be vented outdoors.

Handling of Mold Stain Away:

Minimize the risk of damage caused by errant drops by keeping jugs capped and the filling of pump sprayers in the attic or in a protected, contained area outdoors.
Pump sprayers with On and Gone are NOT to be carried indoors without the release valve being open and all pressure released from the canister. This includes de-pressurization before entering the house and again when exiting the attic.

Equipment to Apply Mold Stain Away:

It is not recommended to use foggers or airless spray systems due to damage to seals and gaskets that can be caused by the product. A pump sprayer rated for Bleach application is the most recommended tool.

The sprayer must also have an adjustable tip or a tip which will deliver a very fine mist. When spray is heavy it will result in drips and streams rather than what is most effective for coverage of mold stains – a mist.

For small spaces, tough to reach areas and singular vertical studs a smaller hand held spray bottle is effective. Be careful not to leave Mold Stain Away in the canister as they routinely develop leaks due to the active chemical expansion in a confined space with predictable consequences in the truck or storage room.

Applying Mold Stain Away:

Results in terms of mold stain removal are typically seen within 90 seconds. The surface will continue to brighten for the next 24 hours. Very quickly the applicator will be able to identify areas to hit again with the product or to selectively agitate or brush. Rarely will On and Gone need to be brushed to obtain results.

A typical application plan is to start at one point in the attic and continue around the entire space. Technicians can apply from the soffits up to the crown of the attic or reverse if so desired. By the time the starting point is reached the product will have definitely had time to work and any areas to reapply will be apparent.

Application technique is to apply a fine spray at the surface. Start at the “crotch” areas where sheeting and truss meet, then do sheeting between trusses. Crotches sometimes require a second spray.

Special Considerations for Application of Mold Stain Away:

When applying Mold Stain Away to the extreme edges of sheeting at Soffits, care must be taken not to overspray and send active product down through the soffits to material below. Siding will show evidence of application if spray is allowed to run down. Same with furniture below the soffit. The applicator must know what is below the soffits, and ensure proper fine mist is applied to mold stained material rather than trying to reach into the furthest reaches with a concentrated “target spray”. If there are materials below the soffit which could be damaged, consider blocking the open soffits to prevent errant sprays leaking through.

Clean up:

After time has been spent removing mold stains with Mold Stain Away, care must be taken to ensure active product is not exposed to the building surfaces along the path to exit. Specifically, gloves and suit will typically have an accumulation of product upon them. Care must be taken when removing this PPE to ensure neither drips not coated material touches non protected surfaces. This PPE should be bagged in the containment area.

Care must also be taken when removing empty jugs of product and the application tools so that drips are not possible. A visual inspection is recommended and quality grade drop cloths to stop drips is recommended.

Storage of Mold Stain Away:

As a sodium hypochlorite based product, the peak potency will be maintained if product is used within 6 months of manufacturing date.

Mold Stain Away’s potency is affected by extremes of temperature as well as sunlight (UV) and air exposure. The end result is accelerated degradation of potency. The product will freeze in the winter which accelerates loss of potency. In summer the heat produced in a truck will be enough to destroy the product. When a bottle is opened, it also accelerates degradation.

Unopened boxes of Mold Stain Away should be stored in a location which is neither prone to freezing nor excessively high temperatures. It should never be stored in unheated trucks in freezing temperatures nor should it spend time in a hot truck in the summer months. If the temperature is too hot for a dog to be left in a truck, don’t leave Mold Stain Away as well.

2. *Keep Away* ™ Crystal Shield

Where Mold Stain Away removes heavy black mold stains very quickly, Keep Awayis the sealant to apply to prevent the re-growth of mold on a cleaned surface. It is a high pH product which bonds to the surface it has been applied to and creates a "shield" which maintains its pH indefinitely. The product is guaranteed to maintain its high pH for 10 years with a written manufacturer's warranty.

Each box of Keep Away contains a 1 kg bag of product and a small packet of stabilizer so the applicator needs to ensure both the large and small bags are present when the box is opened. There is also a small vial of colorant to be used when applicator desires tinting to aid in application.

Coverage of a five gallon mixture, when using recommended nozzle tips, will be a minimum of 1500 sq ft. A five gallon pail with a 517 tip can produce between1500 and 1800 sq ft of coverage.

Visit www.moldstainaway.com to watch video on mixing instructions.

PPE Requirements:

The PPE recommended to be used is that typically used for a Level 2 or 3 mold remediation project. (CCA 82, 2004) Specifically:

PPE	Mold Removal	Application of Gone 4 Good
Suit	Particle Suits	Particle Suit. Hood needs to be properly fitted under mask
Mask	Full Face Respirator	Full Face Respirator with P100 and organic vapor cartridge filter or equivalent (Level 2)
Mask	PAPR	Full Face Respirator with P100 and organic vapor cartridge filter or equivalent (Level 3)
Gloves	Nitrile	8mm minimum
Tape	Red Tuc or equivalent	Seal suit to mask, gloves and booties. This is a step that is critical to protecting the applicator. Especially where the hood meets the face shield at the applicator's forehead and around neck area.

Preparation of Job Site:
It is assumed that all required site preparation needed for performing a mold remediation are in place.

The recommendations to prepare the site area:

Patio or Entrance of Home/Building:

The most common equipment used to apply ***Keep Away*** is an airless sprayer.
Place a heavy duty drop cloth at the entrance or Patio and place the airless equipment, 5 gallon bucket with water, drill with mixer, box of Keep Away and perform mixing there.

Pathway through Home/Building:

Due to the potential damage to carpets, other coloured surfaces and walls, drop cloths should be placed along the entire walkway that a person applying ***Keep Away*** would travel.

Containment:
Containment from the living space is needed. The use of T-flaps or zippers are recommended. Drawing air from the containment area and pushing it up into the attic is necessary to prevent airborne particulate of the ***Keep Away*** drifting down into the containment area.

Handling of Product:

Keep Away is a high pH product that is mixed on site. It is recommended that a mask and eye protection be used when mixing the product. If poured too rapidly into water a plume of fine powder can be produced which can be an irritant. As a drill will be used to mix the product the risk always exists that product could end up in one's eye. High pH products will definitely irritate the eye. Gloves should always be worn as well.

Mixing Instructions:

Product needs to be mixed with clean water in a five gallon pail.

Each box contains 2 plastic bags of product. One is 1 kg or product, second smaller bag is a stabilizer. Both must be mixed together in water.

Fill 5 gallon pail to within 3 inches of rim.

Remove twist tie from larger bag, submerse bag opening into water and slowly empty the

contents into the water. This will remove any chances of powder in the air. Place bag into original box.

Open smaller bag and pour contents into mixture.

Place mixing attachment onto drill, then place attachment into pail. Carefully turn on drill and mix contents thoroughly for 5 minutes. Carefully remove mixing attachment from pail watching for drips.

If a tint is desired, pour contents of vial into mixture. With drill and attachment, thoroughly mix again to achieve a uniform color. Cap vial and place in plastic bag as it is a very powerful tinting agent. Stains on carpets or other surfaces will be extremely difficult to remove.

Application Equipment:

Keep Away is typically applied with an airless sprayer. Tip size is crucial to optimizing coverage. Recommended spray tip size is 517.

Application of *Keep Away*:

Spray as with any encapsulant. The objective is a uniform and complete coating of remediated surfaces. Coat sheeting and all exposed wood surfaces in an attic, or all concrete surfaces in a crawl space.

As with Mold Stain Away, care must be taken when spraying product in and around soffits. Do not spray a stream of product down the soffit as it may stream out and then down the walls of onto material directly below. Damage to unprotected material can happen. If there is risk of damage consider covering the soffits as spray is being applied.

Storage:

New product: should be stored in an environment of low humidity. Life of product is indefinite as long as it remains dry. If exposed to high humidity, and bag for some reason has not been adequately sealed, it may harden and be damaged to point where it will not mix.

Left over product: Product that has been mixed but not used can be kept for about a couple of weeks. It must be securely covered with a lid on the pail. It must be remixed thoroughly before attempting to spray. Do NOT freeze.